DOCUMENT RESUME

ED 260 511 EA 017 960

AUTHOR Yackel, Ivan
TITLE An Analysis of Leadership Styles and Stress in the Rural Principalship.
INSTITUTION Saskatchewan School Trustees Association, Regina. Research Centre.
REPORT NO SSTA-R-R-100
PUB DATE Jan 84
NOTE 22p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Administrator Attitudes; Attitude Measures; Correlation; Elementary Secondary Education; Foreign Countries; *Leadership Styles; *Principals; Questionnaires; Rural Schools; Statistical Surveys; *Stress Management; Stress Variables
IDENTIFIERS Saskatchewan

ABSTRACT

The purpose of this study was to determine the nature of the relationship between leadership style and administrative stress in the rural principalship. Administrative stress was examined in terms of boundary-spanning, role-based, conflict-mediating, and task-based stressors, using measures of both frequency and intensity. The potential role of methods of coping with stress employed by principals, as a moderator variable, was recognized and analyzed for its influence on the above relationship. The questionnaire format, administered to male principals of K-12 and 1-12 schools in rural Saskatchewan, consisted of 11 demographic questions, the Least Preferred Coworker Instrument (LPC), the Administrative Stress Index (ASI) (frequency), the ASI (intensity), and a Coping Mechanisms section that asked respondents to rank the three methods they used most frequently for coping with stress. A Pearson's r correlation matrix was used to compare leadership style as measured by the LPC with the total frequency of administrative stress and its four sources. T-tests were run on the coping methods used by high LPC and low LPC principals. The study found no relationship between leadership style chosen (as measured by the LPC) and sources, frequency, or intensity of administrative stress experienced (as measured by ASI instruments), nor between most frequent methods of coping and the other variables. (Author/TE)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

BEST COPY AVAILABLE

ED260511

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Craig Melvin

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

# AN ANALYSIS OF LEADERSHIP STYLES AND STRESS IN THE RURAL PRINCIPALSHIP

RESEARCH CENTRE

ssta

Saskatchewan School Trustees Association

EA 017 960

# AN ANALYSIS OF LEADERSHIP STYLES AND STRESS IN THE RURAL PRINCIPALSHIP

By

Ivan Yackel

S.S.T.A. Research Centre Report No. 100

A report with recommendations prepared under the auspices of the Saskatchewan School Trustees Association Research Centre

January, 1984

Note: The opinions expressed in this report are those of the author and may or may not be in agreement with SSTA officers or trustees, but are offered as being worthy of consideration by those responsible for making decisions.

THE RESEARCH CENTRE
SASKATCHEWAN SCHOOL TRUSTEES ASSOCIATION
#400 - 2222 13TH AVENUE, REGINA, SASKATCHEWAN

ABSTRACT

The purpose of this study was to determine the nature of the relationship between leadership style and administrative stress in the rural principalship. Administrative stress was examined in terms of boundary-spanning, role-based, conflict-mediating and task-based stressors with measures of both frequency and intensity being utilized. The potential role of methods of coping with stress employed by principals, as a moderator variable, was recognized and analyzed for its influence on the above relationship.

The population chosen for study consisted of male principals of K-12 and 1-12 schools in rural Saskatchewan.

Information was gathered by questionnaire which had as its format, eleven demographic questions, the Least Preferred Co-worker Instrument (LPC), the Administrative Stress Index (ASI) (frequency), the Administrative Stress Index (ASI) (intensity), and a Coping Mechanisms Section which asked respondents to rank the three methods of coping with stress they used most frequently.

A Pearson's r correlation matrix was used to compare leadership style as measured by the LPC with the total frequency of administrative stress and its four sources as mentioned above and with the total intensity of administrative stress and its four sources. T-tests were run on the means of coping methods used by high LPC and low LPC prin-

cipals. T-tests were also run on the means of total frequency of administrative stress and its four sources and total intensity of administrative stress and its four sources, experienced by the population and broken down by the three most frequently reported methods of coping with stress.

This study found no relationship between leadership style of the population chosen, as measured by the LPC, and sources, frequency, or intensity of administrative stress experienced, as measured by the ASI instruments. Further, this study found no relationship between most frequent method(s) used for coping by the population chosen and leadership style, sources, frequency, or intensity of administrative stress experienced.

* * *

INTRODUCTION

> As much as any group in the history of mankind, today's executive are over-worked, pressured and pushed to the point of physical illness or emotional misery. Whether this is in fact real or imagined is irrelevant. People generally behave in ways that support their feelings, and today's executives feel they have their share of fears, anxieties, and stress. (Humphrey, 1978: 38)

Part of this group, as witnessed by the recent deluge of literature on teacher and administrator "burnout" is composed of public school principals. Admittedly, operating in a "tame" organization alters somewhat the nature of the stressors to which they are exposed. However, in an era of declining enrollments, an emphasis on accountability, a perceived push for democratically run schools, increasing technology and increased responsbilities and duties as outlined in the

Education Act (1978), public school principals in rural Saskatchewan perceive themselves as experiencing considerable stress. Fallon stated that "perhaps no area of education imposes more stress than the public school principalship. Confrontation, conflict, and compromise are constants which principals face on a daily basis." (Fallon, 1981: 28)

There has been a considerable amount of recent literature and research directed towards discovering the sources of administrative stress experienced by today's managers and executives. A component of several of the areas identified as sources of administrative stress (Cooper and Marshall, 1977; Gmelch, 1977) relates to leadership style. Examining the possibility of a relationship between stress and leadership style, however, has been neglected to date both in research and the literature. It was the intention of this study to examine the relationship between administrative stress in the principalship and the leadership style of the principal.

BACKGROUND

Since research had not specifically dealt with the variables of leadership style and administrative stress, empirical support for such a study did not exist.

Nevertheless, the possibility of a relationship between these variables was postulated on the basis of perception and perceived control. Bourne (1969) suggested that "the degree of stress which an event in the environment is considered to provide. . . is based entirely on the subjective assessment of the event by the investigator." Further, Girando (1979: 107) stated that the expectation of control over stressors

could be effective in reducing stress, citing studies by Green (1970) which concluded "that anything that adds to the feeling of self-control is likely to reduce the severity of stress while perceptions of helplessness or lack of control can lead to increased stress." Ban (1980) also suggested that the key to coping with stress and preventing "burnout" was enhancing the perception that you are in charge and can control your own life. In other words, control (or perceived control), over the extent and duration of stress greatly influences its effect (Turner, 1976). Pilowsky (1974) in his discussion of aspects of patients under severe stress stated that their self-perception was that of being less in control, while Gilbert and Mangelsdorff (1979) in their study of clients in a counseling program concluded that perceptions of personal control are related to what individuals view as potentially stressful and to their reactions to stressful situations.

Nelson and Nelson in referring to families under stress stated that "the more control a family believes it has over its own destiny the more likely it is to cope positively" (Nelson and Nelson, 19[illegible] 35).

This concept of control permeated the literature on leadership as well. Hemphill (1968) saw leadership hinging to a large extent on "control and coordination of members of the organization," while Fiedler suggested that the interpersonal behaviour by which leaders attempt to exert influence and control reflects their leadership style (Hurlbert, 1973).

"Leadership is by definition, an interpersonal relation in which power and influence are unevenly distributed so that one person is able to direct and control the actions and behaviours of others...." (Fiedler, 1967: 11) When someone is asked to perform a task in a situation where he perceives

that he has little control, he typically feels tense and anxious (Fiedler, 1967). Tannenbaum, Weschler and Massarik (1961) also supported the concept of control in leadership, suggesting control is a major component of any organization synonymous with the notions of influence and power (Hurlbert, 1973). Richert (1968) suggested that this ability or capacity to direct or influence others in the attainment of some goal, namely control, is a major component of leadership style. In conclusion Gmelch (1977) depicted the amount of control as a filter in the human stress system, suggesting that absence of control results in heightened stress.

Because certain types of stress and leadership style appeared to correlate with control and perception of control respectively, this writer hypothesized that there may indeed exist a relationship between leadership style of principals and administrative stress they experience.

DEFINITION OF TERMS

For the purpose of this study the following definitions of terms were used.

Stress: stress was conceptually defined as "a (perceived) substantial imbalance between demand and response capability, under conditions where failure to meet demand has important (perceived) consequences" (McGrath, 1970).

Stressor: a stressor was defined as that which produced stress.

Administrative Stress: administrative stress was defined as the distress experienced by principals as a direct result of their administrative positions. Four specific types of stress were incorporated in this study: (1) role-based stress, associated with the administrative role and responsibilities; (2) conflict-mediating stress, concerned with conflict

resolution among students, parents, and school; (3) task-based stress, day-to-day stress in an organization setting; and (4) boundary-spanning stress, arising from administrator activities in relating the school to the external environment.

Leadership Style: leadership style was defined as the underlying needs structure of the individual which motivates his behaviour in various leadership situations (Fiedler, 1967) and must be distinguished from leader behaviour alone, which will not necessarily be a direct reflection of the needs orientation of the individual, dependent upon the situation. Fiedler's dichotomy was utilized in classifying leadership styles as task or person-oriented.

Coping Methods: coping methods were defined as techniques recognized in the literature or used by individual subjects as a conscious response to stress experienced.

## STATEMENT OF THE PROBLEM

The main purpose of the study was to determine the nature of the relationship, if any, between leadership style and administrative stress in the principalship. A secondary purpose was to examine methods employed by principals for coping with stress. Emerging from the above were the following sub-problems:

(1) What is the nature of the relationship between leadership style and sources of administrative stress in the principalship?

(2) What is the nature of the relationship between leadership style and frequency of administrative stress in the principalship?

(3) What is the nature of the relationship between leadership style and intensity of administrative stress in the principalship?

(4) Is there a relationship between leadership style and the most frequent method(s) employed by principals for coping with stress?

(5) Is there a relationship between the most frequent method(s) employed by principals for coping with stress and sources of administrative stress?

(6) Is there a relationship between the most frequent method(s) employed by principals for coping with stress and frequency of administrative stress?

(7) Is there a relationship between the most frequent method(s) employed by principals for coping with stress and intensity of administrative stress?

IMPORTANCE OF THE STUDY

"Stress is acknowledged as a study topic of vital importance not only because of the mental and physical suffering it can cause individuals but also because it may well make a substantial, if indirect, contribution to the social and economic problems of today's society." (Marshall and Cooper, 1979: 11)

Sweetland (1979) suggested that considerably more investigation was needed of all aspects of stress, particularly in regard to the interactive effects of individual stressors with various personality types and situational characteristics.

Since, as previously stated, the possibility and nature of a relationship between the leadership styles of principals and the source(s), frequency and intensity of administrative stress they experienced was neglected to date both in research and the literature, this study had

several purposes: (a) to provide research on stress in a new area of investigation; (b) to increase awareness among practising principals and educators of the relationship, if any, between leadership style and administrative stress, and the nature of this relationship; and (c) to establish, and make administrators and educators aware of any relationship between the use of methods of coping with stress and the frequency and intensity of administrative stress principals experience.

It was further hoped that in an era when many highly qualified and very capable principals are leaving the field because the administrative stress "just isn't worth it", this research would stimulate others to investigate leadership styles as a specific correlate of administrative strategies or techniques for avoidance or reduction of stress in the principalship. Since "the incidence of hypertension and heart problems among principals is one of the highest of any of the professions" (Fallon, 1981: 28), this was seen as a worthwhile pursuit.

## THE POPULATION

The population chosen for study consisted of male principals of K-12 or 1-12 schools in rural Saskatchewan. Of the 168 possible subjects, 75% responded yielding 122 usuable sources of data.

## METHODOLOGY

Information was gathered by questionnaire during the first two weeks of June, 1981. The questionnaire had as its format, eleven demographic questions (the first four of which served only to verify that the respondents were bona fide members of the population chosen for study), the Least Preferred Co-worker Instrument (LPC), the Administrative Stress

Index (ASI) (frequency),the Administrative Stress Index (ASI) (intensity), and a Coping Mechanisms section which asked respondents to rank the three methods of coping with stress they used most frequently.

ANALYSIS AND TESTING OF RESULTS

A Pearson's r correlation matix was used to compare leadership as measured by the LPC with the total frequency of administrative stress and its four sources as mentioned above and with the total intensity of administrative stress and its four sources. This statistical technique allowed for a general examination of potential relationships in a global fashion.

The top quartile of LPC scores was used to form a relationship-oriented group of principals while the bottom quartile made up a task-oriented group. Comparison of means of demographic variables for these groups showed them to be homogeneous in this respect and t-tests of means of these independent samples were performed utilizing the means of each of the twenty-eight items on the ASI (frequency) and ASI (intensity) instruments as well as the means of total frequency of administrative stress and its four sources and total intensity of administrative stress and its four sources. This statistical technique facilitated the testing of hypothesis 1, 2 and 3 while a comparison of coping methods used by high LPC and low LPC principals (Table 6) allowed for the testing of hypothesis 4.

T-tests were also run on the means of total frequency of administrative stress and its four sources and total intensity of administrative stress and its four sources, experienced by the population and broken down by the three most frequent methods of coping with stress used "most

frequently," "next in frequency" and "third in frequency" (Table 7). This statistical method provided for the testing of hypothesis 5, 6 and 7.

## CONCLUSIONS

This study provided evidence to support the following conclusions:

1. This study found no relationship between leadership style of the population chosen, as measured by the LPC, and sources of administrative stress experienced, as measured by the ASI (frequency) and ASI (intensity) instruments.

2. This study found no relationship between leadership style of the population chosen, as measured by the LPC, and total frequency of administrative stress experienced, as measured by the ASI (frequency) instrument.

3. This study found no relationship between leadership style of the population chosen, as measured by the LPC, and total intensity of administrative stress experienced, as measured by the ASI (intensity) instrument.

4. This study found no relationship between the leadership style of the population chosen, as measured by the LPC, and the most frequent method(s) employed by this group for coping with stress.

5. This study found no relationship between the most frequent method(s) for coping with stress employed by the population chosen and the sources of administrative stress experienced by this group.

6. This study found no relationship between the most frequent method(s) for coping with stress employed by the population chosen and

frequency of administrative stress experienced by this group.

7. This study found no relationship between the most frequent method(s) for coping with stress employed by the population chosen and intensity of administrative stress experienced by this group.

## DISCUSSION

Examination of the demographic data in its entirety revealed little that was unexpected. Since respondents had more teaching experience than administrative experience, it appears that principals are being recruited from or are emerging from the ranks of teaching. The further finding that most of the respondents have more teaching time than they have administrative time would support this and is consistent with this writer's experience.

The frequency and intensity of stress reported as a result of each of the four sources of stress in the principalship (Table 3) would suggest that the components of the ASI (frequency) and ASI (intensity) instruments were relatively well balanced in terms of producing total frequency and intensity scores.

An interesting aspect of the "other" responses to these two instruments was the frequency and intensity of stress experienced by principals as a result of perceived "apathetic" or "negative" attitudes on the part of teachers.

That these attitudes are prevalent was not expected, however, since such attitudes often manifest themselves in a direct questioning of the value(s) and purpose of education and the school [hence the principalship] it is not surprising that they would prove stressful for principals. In retrospect this writer feels that these attitudes should have been included

in the ASI (frequency) and ASI (intensity) instrument.

The data regarding sources of administrative stress and leadership style of principals indicated that there was no relationship between the two. This finding was not consistent with the literature which suggested that the nature of the stressor should correlate with the motivation of the individual (Levine, Sol and Scotch, 1970; McGrath, 19[illegible]; Appley and Trumbull, 1971; French and Caplan, 1972; House, 1974; Cooper and Payne, 1978; Marshall and Cooper, 1979).

A possible general rationale for these results is that principals may perceive the nature of stressors in light of their own motivation. Thus, while filling out forms may be perceived as a task-based stressor by the task-oriented principal, it may be viewed as a relationship-based stressor by the person-oriented principal who views the filling out of these forms as a vital part of his relationship with his superordinates.

Simlarly, personnel conflicts may be regarded by task-oriented principals as detrimental to the task of running the school effectively and therefore as task-based stressors.

Since there was no significant difference in the mean total frequency and intensity of administrative stress experienced by high LPC and low LPC principals, it would appear that both groups experience relatively similar stress as a result of the principalship. This may be a result of the above mentioned perception of the nature of stressors in light of their own motivation or the possibility that task and relationship-based stressors are distributed equally in the principalship, the latter being a view inconsistent with this writer's experience. However, if one were to accept the first explanation given above, then

this writer (by virtue of his own motivation) would be unable to objectively weight the task and relationship-based stressors within the principalship since the motivation of the writer as either task-oriented or person-oriented would colour his perception of stressors.

More specifically, in light of these findings the writer must question the ASI instrument created by Tung (1979) and used in this research.

In retrospect, the writer feels that while this instrument may be adequate for obtaining an overall level of stress (intensity or frequency) for a subject, the suggestion that what Tung viewed as a task-based, role-based, conflict-mediating or boundary-spanning stressor would be similarly perceived by all subjects, must be challenged.

The literature contended that cognitive appraisal, prior experience (successful or unsuccessful), personality, and motivational structure of each subject would affect his perception of each stressor (McGrath, 1971). The writer would further contend that the classification of sources of stress (Tung, 1979) may also be dependent upon the perceptions of the individual. Acceptance of this contention suggests that this study, by employing the ASI as a means of determining the nature of stressors, suffered from a flaw, in that the perceptions of Tung may not have corresponded with those of all subjects.

Use of interview techniques and instrumentation which would allow principals to classify their own stressors could be used to test the methodology employed in the creation of the ASI.

Fiedler (1967) concluded that the task-oriented leader tends to be less concerned about what others, public and staff think, thus avoiding

a major stressor experienced by a person-oriented leader.

The writer, based on the literature, his personal experience in the principalship, and the convictions of many educational administrators with whom he has personal contact, had agreed with this in suggesting that person-oriented principals would experience more stress (frequency and intensity) than task-oriented principals. The assumption leading to this suggestion must be questioned.

Based on this study, the writer feels that the task-oriented leader may indeed view "what others, public and staff think" in terms of tasks rather than relationships. The task-oriented leader may feel that opinions of others affect his performance of tasks and thus may be as concerned with them as a person-oriented leader.

The writer's basis for originally accepting this assumption hinged to a large extent on expectation of control by the principal in his particular situation; a point strongly supported by the literature (Pilowsky, 1974; Tanner, 1976; Gilbert and Mangelsdorff, 1979; Girando, 1979; Ban, 1980).

In light of the findings of this study, the writer suggests that a detailed examination of the nature of the favourableness or unfavourableness of each respondent's situation would have strengthened this study by providing for a more detailed interpretation of the findings. In retrospect, the writer would suggest that motivational structure combined with situation may have been a substantial contributor to total stress (intensity and frequency) (Fiedler and Csoka, 1974). Further, the nature of specific situations may have resulted in principals revealing secondary motivations (Fiedler and Csoka, 1974) for which allowances were not

made in the design of this study.

As mentioned earlier in this study, methods of coping with stress employed by principals was recognized as a potential moderator variable and was included by way of avoiding a possible threat to the integrity of the study.

As predicted there was no significant relationship between most frequent method(s) for coping with stress employed by principals and leadership style, sources of administrative stress (frequency and intensity), total frequency of administrative stress, or total intensity of administrative stress. As suggested in the literature, stress would appear to be a very personal matter for which there are no general panaceas (Gmelch and Swent, 1981).

That this study found no relationship between leadership style as measured by the LPC and the most frequent method(s) employed by principals for coping with stress would suggest that the choice of coping mechanisms is not based solely on an individual's broad motivational structure of task or person orientation. The literature had predicted this outcome by suggesting the highly personal nature of coping mechanisms (Gross, 1970; McGrath, 1971; Gemlch and Swent, 1981; Lemley, 1981).

That this study found no relationship between most frequent method(s) for coping with stress employed by principals and sources of administrative stress they experience was predicted. Bearing in mind the correlational nature of this study causality cannot be assumed. However, one might speculate that methods of coping with stress are not employed as a response to the specific nature of stressors experienced, but rather in response to stress "in general."

This study found no relationship between the most frequent method(s) for coping with stress employed by principals and frequency or intensity of administrative stress experienced. The correlational nature of this study limits the rationale for this to speculation on the writer's part that coping methods used are not selected in response to the frequency or intensity of administrative stress experienced but are chosen for reasons such as personal likes and dislikes, past experience, accessibility, cost, social acceptability, peer influence, etc.

The finding that those principals using alcohol as their third most frequent coping mechanism experienced significantly less intensity of stress than those who used relaxation has been attributed to chance. It does, however, present an interesting result which warrants further study and will hopefully be included in research on methods of coping with stress.

The "other" responses to the Coping Mechanisms section of the questionnaire revealed that "hobbies" should have been included as a separate coping mechanism since twenty-five percent of the respondents listed this in some form. That eleven percent of the respondents work at a second job (including farming) might have been predicted by the writer based on his own experience in the field. It is interesting, however, that this serves the role of a coping mechanism. As elaborated upon by some respondents, "physical" work as opposed to "mental" work was seen as a refreshing change and allowed the mind to relax after the day's mental activities.

Literature available since the completion of data gathering for this study has suggested that group coping mechanisms should have been

included as an item on the Coping Mechanisms section of the questionnaire. Vanderpol (1981: 40) concluded that merely because stress is an individual thing does not mean that we shouldn't look at collective coping strategies.

A further point worth noting is the time of year that this study was conducted. Comments by several of the respondents indicated that they would have preferred to take part in this study at a less "hectic" time of the school year. The possibility exists that the nature of stressors as task or relationship-based varies somewhat throughout the school year and may have influenced the findings of this study. The form filling and "paper shuffling" associated with June of each year may have served to emphasize the task-based stress experienced. Certainly such a possibility should not be ignored in future research.

Informal comments from respondents with whom the writer had personal contact revealed that several principals were unwilling to put in writing their perceptions about the intensity and frequency of stress caused them by their directors or superintendents. Although the writer used established procedures to reassure all respondents of their anonymity and the confidentiality of their responses (see Appendix E), unwarranted fear of having their responses made public may have affected the information given by some respondents.

In conclusion, it should be noted that several individual subjects with extremely low or high LPC scores did experience greater frequency and intensity of administrative stress from those stressors, either task or relationship-based corresponding to their motivational structure. The writer hastens to note, however, that several individual subjects with

extremely low or high LPC scores experienced greater frequency and intensity of administrative stress from those stressors, either task or relationship-based which did not correspond to their motivational structure as determined by the LPC instrument.

The scarcity of such responses suggests that further study utilizing the most refined instrumentation available would be necessary before any worthwhile speculation on these extreme cases could be made.

## RECOMMENDATIONS

The recommendations based on the findings of this study are as follows:

1. Since the nature of stressors may be dependent upon the perceptions of the individual which may in turn be influenced by the individual's motivational structure, more absolute physiological measures of stress should be used in further research in this field.

Potential circularity in stress research, such as that conducted within this study, stems from instruments which rely on individuals' consciously acknowledged perceptions of stressors and stress. A closer integration of such research with that of the medical profession could provide more objective measurement of physiological responses to specific stressors as well as to intensity, frequency and duration of stress (Morse and Furst, 1979).

2. Research in the area of administrative stress within an educational setting should recognize the possibility of time of year influencing the nature of stressors. As a result, data collection should be continuous throughout a year or semester to obtain a more accurate global picture of stressors within this environment.

3. Further research dealing with administrative stress in the principalship should take into account the leadership style and/or leader behaviours of the directors or superintendents involved, since their superordinate position with respect to the principalship may make them and/or their actions a major source of administrative stress for the principal.

4. Research involving methods employed for coping with stress should utilize more scientific data collection along the following lines:

(a) Coping methods should be defined in terms of preventative or curative.

(b) More indirect methods of data collection should be used to avoid inaccuracy of data with regard to less socially acceptable coping methods.

(c) More comprehensive measures of frequency and duration of use of coping methods is required to take accurate comparisons within the population.

5. Since this study indicated a lack of correlation between leadership style and administrative stress in the principalship, a further area of potential study is the relationship between leadership style of principals and teacher stress. Proposed research of this nature should take into consideration the previous recommendations of this study.

* * * * * * * * * * *